

# INDICATORS OF THE EVOLUTION OF TOURISM PRACTICES FROM SOCIAL NETWORKS



Bordeaux &  
Nouvelle-Aquitaine

Figure 1

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Select images shared from Flickr by the localization information of each one which possesses a valor of latitude and longitude.

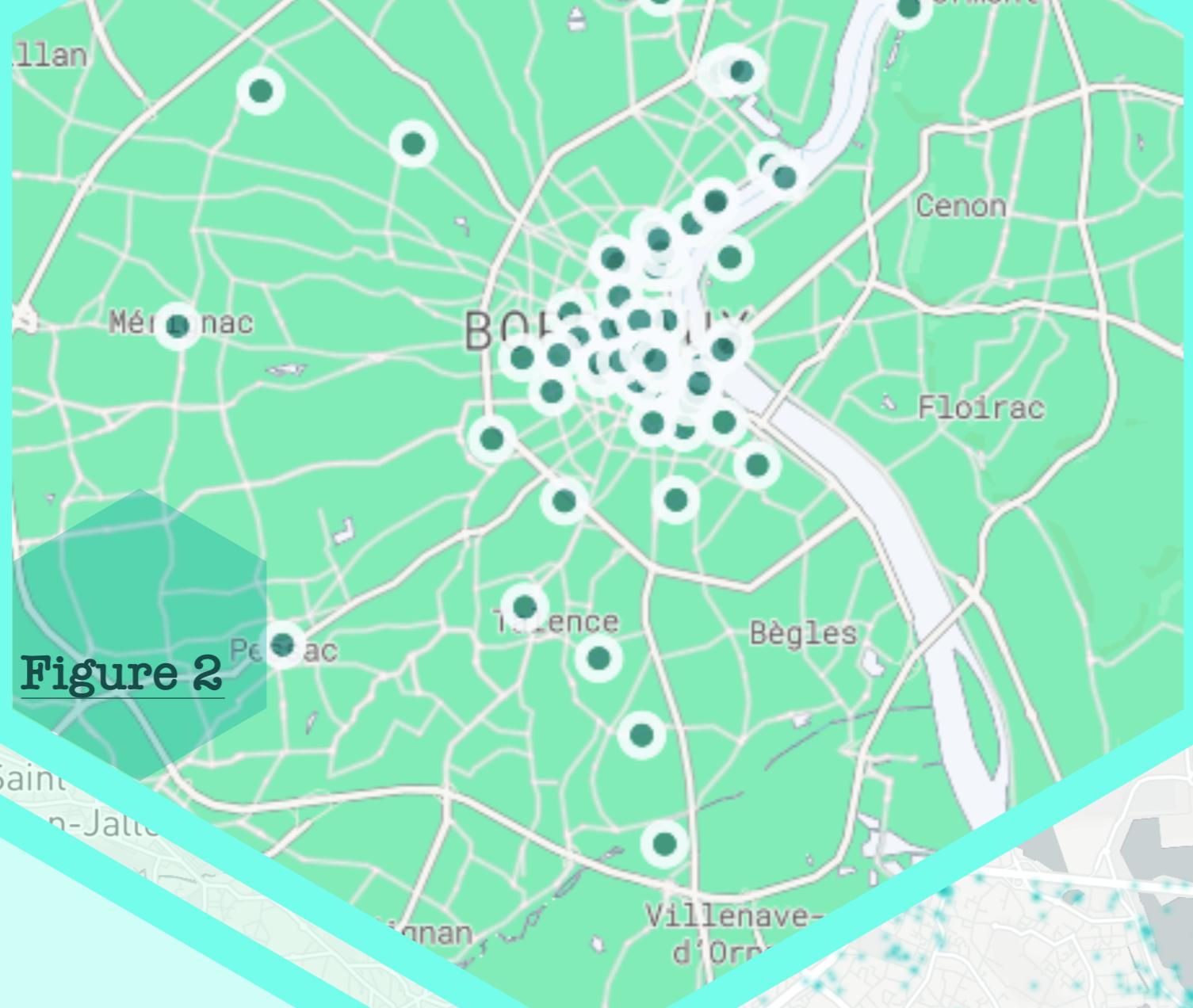


Figure 2

Clustering these images collected from DataBase, in order to find the point of interest which could present a sightseeing spot significantly attract tourists but also maybe a spot attracts more ordinary city dwellers.

Density-based spatial clustering of noise (DBSCAN), a density-based algorithm.

## Top 10 spots of Bordeaux

Place de la Bourse -	44.8424,-0.5706
Place de la Comédie de -	44.8424,-0.5747
Cathédrale Saint-André -	44.8379,-0.5777
Château du Hâ Bordeaux -	44.8366,-0.5808
de Cestas Pont de Pierre -	44.8375,-0.5648
Cours de l'Intendance -	44.8415,-0.5793
Basilique Saint-Michel -	44.8344,-0.5657
Porte d'Aquitaine -	44.831,-0.5727
Église Catholique Saint-Éloi -	44.8353,-0.5716
Gare Saint-Jean -	44.8263,-0.5562

With these clusters detected, discover their interesting relations hidden, this machine learning method called association rule learning. The best-known constraints of association rule are minimum thresholds on support and confidence.

Top 10 spots of Nouvelle-Aquitaine

$$\text{Support} = \frac{\text{frq}(X, Y)}{N}$$

$$\text{Confidence} = \frac{\text{frq}(X, Y)}{\text{frq}(X)}$$

$$\text{Lift} = \frac{\text{Support}}{\text{Support}(X) \times \text{Support}(Y)}$$

Figure 3

Figure 1, 376 clusters detected from Nouvelle-Aquitaine

Figure 2, 61 clusters detected from Bordeaux.

Figure 3, some association rules between the clusters detected from Bordeaux which has a Confidence more than 0.5.

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